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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/831,453	05/09/2001	Shinji Okuda	2001-0464A	4327

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WASHINGTON, DC 20006-1021

EXAMINER
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PIAZZA CORCORAN, GLADYS JOSEFINA

ART UNIT	PAPER NUMBER
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1733

DATE MAILED: 08/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/831,453

Applicant(s)

OKUDA ET AL.

Examiner

Gladys J Piazza Corcoran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-61 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-61 are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other: \_\_\_\_

**DETAILED ACTION**

***Election/Restrictions***

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1-16, 31-39, 43-50, 60, 61 drawn to a bead molding method.

Group II, claim(s) 17-30, 40-42, 51-59 drawn to a bead molding apparatus.

2. The inventions listed as Groups I and II do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Group I is directed to a bead molding method where there is either a gas stream forming step or a foamable material forming step followed by a material stream forming step in a high speed flow region in an outer peripheral space about and enclosing the gas or foamable material and a bead molding step for molding the bead by reducing the flow speed of the material stream from the high speed flow to the low speed flow.

Group II is directed to a bead molding apparatus with a discharging device including an inner nozzle and an outer nozzle about and enclosing an outer periphery of the inner nozzle, a gases feed unit or a foamable material unit for feeding material to the first inlet, and a material feed unit for feeding material to the second inlet. The references Trevathan et al. (US Patent No. 5,089,190), Browne (US Patent No. 4,744,932), Torobin (US Patent No. 4,303,736) and Shaw et al. (US Patent No. 3,635,632) all show a bead molding apparatus with an inner nozzle and an outer nozzle about and enclosing an outer periphery of the inner nozzle, a gases feed unit for feeding material to the first inlet, and a material feed unit for feeding material to the second inlet that meet the limitations of the claims in Group II. Additionally, the references Doll (US Patent No. 3,901,958) and Addeo et al. (US Patent No. 5,368,458) show a bead molding apparatus with an inner nozzle and an outer nozzle about and enclosing an outer periphery of the inner nozzle, a foamable material unit for feeding material to the first inlet, and a material feed unit for feeding material to the second inlet that meet the limitations of the claims in Group II. Therefore the special technical feature of the

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claims in Group II are not the same and do not correspond with the Special technical feature in the claims of Group I as evidenced by the references cited above.

3. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

**Species I**, where the bead molding is a hollow bead formed of highly viscous material, apparently directed to claims 1, 3-6, 12-16 in Group I and claims 17, 22-30 in Group II.

**Species II**, where the bead molding is a hollow bead formed of a foamable material, apparently directed to claims 2, 43-45 in Group I and claims 17, 22-30 in Group II.

**Species III**, where the bead molding is a foamed bead in a given shape and covered with a highly viscous material, apparently directed to claims 7-11, 46-50 in Group I and claims 18-21, 51-59 in Group II.

**Species IV**, where the bead molding is a hollow bead formed of a hot melt material, apparently directed to claims 31, 33, 34 in Group I and claims 40 in Group II.

**Species V**, where the bead molding is a hollow bead formed of a foamable hot melt material, apparently directed to claims 32, 60, 61 in Group I and claims 40 in Group II.

**Species VI**, where the bead molding is a foamed bead covered with a hot melt material, apparently directed to claims 35-39 in Group I and claims 41, 42 in Group II.

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**Species A**, where the discharging device is capable of being hand-carried and the first and second control valves have a manual on-off operation, apparently claims 25 and 54.

**Species B**, where each of the first and second control valves are automatically opened and closed in response to a control signal, apparently claims 26 and 55.

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply **must also identify the claims readable on the elected species, including any claims subsequently added.** An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

4. The claims are deemed to correspond to the species listed above in the following manner:

Species I, claims 1, 3-6, 12-16 in Group I and claims 17, 22-30 in Group II.

Species II, claims 2, 43-45 in Group I and claims 17, 22-30 in Group II.

Species III, claims 7-11, 46-50 in Group I and claims 18-21, 51-59 in Group II.

Species IV, claims 31, 33, 34 in Group I and claims 40 in Group II.

Species V, claims 32, 60, 61 in Group I and claims 40 in Group II.

Species VI, claims 35-39 in Group I and claims 41, 42 in Group II.

Species A, claims 25 and 54.

Species B, claims 26 and 55.

The following claim(s) are generic: none.

5. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons:

The Species lack the same or corresponding special technical features by requiring a hollow versus a solid bead, a viscous material, foamable material, hot melt material or combinations of two materials.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).


6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gladys J Piazza Corcoran whose telephone number is (703) 305-1271. The examiner can normally be reached on M-F 8am-5:30pm (alternate Fridays off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on (703) 308-2058. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.



Gladys J Piazza Corcoran  
Examiner  
Art Unit 1733

GJPC  
August 6, 2003